

**COASTAL IMPACT ASSISTANCE PROGRAM
(CIAP)
FY 2009
Tier I**

1. PROJECT TITLE: Development of a West Bank Wetland Wastewater Assimilation Process Plant
2. ENTITY NOMINATING THE PROJECT: St. James Parish Council
3. CONTACT INFORMATION: Mr. Jody Chenier
St. James Parish Council
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4. TOTAL CIAP FUNDS REQUESTED: \$1,200,000
5. PARISH CIAP FUNDS REQUESTED: \$1,200,000
6. STATE CIAP FUNDS REQUESTED: None
7. INFRASTRUCTURE FUNDS PROPOSED: None
8. DESCRIPTION AND LOCATION OF PROJECT: The St. James Parish Council plans to construct a wetland assimilation treatment plant on property owned by the Parish Council in Vacherie, La. The plant will collect wastewater from secondary treatment modules and pump the wastewater to a sediment pond area. The pond will discharge into forested wetland areas that will directly affect the swamp land composition and structure. The effluent discharge will be controlled to maximize sediment discharge and improve water quality. The project will use proven scientific research and analysis to provide a wetland wastewater strategy to promote wetland growth and survival. The project will provide low cost benefits to Parish residents and businesses while improving water quality and enhancing deteriorating wetland areas. Unlike conventional tertiary treatment and filterization, the wetland assimilation process reduces the need for chemical treatment and allows for a more natural system, which provides for value added wetland production and absorption. Additionally, the use of a wetland assimilation process will provide a wetland fertilization source, as well as, the removal of excess nutrients, especially nitrogen and phosphorus. The wetland treatment process provides needed sediment and nutrients for the protection of wetlands, wildlife habitat, and forest re-generation. Presently, little or no cypress re-generation occur leaving poorly developing relics. Additionally, where there were once dense stands of cypress and tupelo, areas are becoming open areas without any trees. The Parish will match existing sewerage construction funds to develop a sewer line system to connect all of the surrounding

(Vacherie) area into this wetland enhancement project. The project will provide a means to fully integrate the sewerage treatment needs of all businesses and residents in the surrounding area.

9. **PROJECT TYPE:** Conservation, restoration, and protection of coastal areas.
Within the target area, there are no treatment ponds or municipal sewerage treatment systems. Presently, all residential and commercial structures discharge into open ditches from individual sewerage treatment plants. The development of a waste water assimilation plant to collect and properly treat sewerage before discharging into wetland areas would provide a beneficial wetland use. This project would not only eliminate neighborhood discharges in waterways, but would provide beneficial use of their wastewater to restore and protect wetland areas. Additionally, within the project area, there are several industrial fabrication shops that manufacture and repair pumps, motors, and steel components that are used in the production of offshore gas and oil.
10. **PROJECT JUSTIFICATION:** Poor water quality and water stagnation is a serious threat to wetland habitat. Because swamps in the Barataria Basin have been isolated from the Mississippi River, which was their primary source of water sediments and nutrients, the wetland areas continue to decline. The use of a wetland assimilation process will provide for increase productivity and regeneration of cypress and tupelo swamps, increase in sediment accretion, increase in dissolved oxygen, as well as, a reduction of concentration of nutrients in river water. The proposed project would directly create wetland habitat, reduce wetland loss rates in this area, and provide sustainability to the swamps in the face of long-term subsidence.

The treatment of wastewater through the wetlands' beneficial use process helps mitigate the impact of outer continental shelf activities due to the number of machine and fabrication facilities in the area. These facilities work and manufacture pumps, pipes, oil field accessories, and drilling components that are needed in the oil exploration process. The construction of a wastewater facility within the areas of these fabrication facilities addresses a direct impact of offshore production activities. Additionally, residents who live in close proximity to these facilities will also have the benefits of this type of wastewater treatment. The project will be designed to maximize the amount of influent wastewater that can be discharged into the wetland area to enhance wetland productivity and growth. The Parish is prepared to construct the sewer lines needed to utilize the plant and use the CIAP funds to develop the wetland wastewater assimilation process and sediment pond facility. Further, as the swamps die, the communities lining the Mississippi River are increasingly vulnerable to local and storm surge flooding.

Presently, the Vacherie area wastewater and water quality management plan calls for all discharges to go into the Mississippi River. The use of CIAP funds to construct a wastewater wetland assimilation plant will provide a long-term beneficial use of those wastewater discharges and help restore the wetland areas.

11. **PROJECT COST SHARE (NON-CIAP FUNDS):** The Parish will pay for the material and secondary treatment plants needed to treat the residential and commercial wastewater. Through the approval of a municipal sewerage tax, the Parish is proposing to spend \$16.9 million to install the needed collection and transportation systems. The Parish would then require a full treatment implementation program towards the elimination of discharges into the Mississippi River and other water bodies within the Parish.